

COMPARISON OF FIVE-YEAR OUTCOMES OF STENTING VS. BYPASS SURGERY FOR OSTIAL AND SHAFT UNPROTECTED LEFT MAIN CORONARY ARTERY DISEASE; DATA FROM A MULTI-CENTER REGISTRY

i2 Poster Contributions

Ernest N. Morial Convention Center, Hall F

Sunday, April 03, 2011, 3:30 p.m.-4:45 p.m.

Session Title: PCI - Left Main Disease

Abstract Category: 17. PCI - Left Main Disease

Session-Poster Board Number: 2507-521

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Background: Data for long-term outcomes of stenting versus coronary-artery bypass grafting (CABG) for nonbifurcation lesion of unprotected left main coronary artery (LMCA) disease are limited. We evaluate long-term clinical outcomes after stenting versus CABG for ostial and shaft lesion of unprotected LMCA disease.

Methods: A total of 1083 consecutive patients with ostial and/or shaft of unprotected LMCA stenosis who underwent stenting (n=557) or CABG (n=526) were examined. The 5-year adverse outcomes (death; a composite outcome of death, Q-wave myocardial infarction [MI], or stroke; and target-vessel revascularization [TVR]) were compared with the use of univariate and multivariate analysis.

Results: During follow-up of median 5 years, after adjustment of baseline covariates, the risk of death (hazard ratio [HR], 0.982, 95% confidence interval [CI], 0.773-1.248, p=0.885), and the composite of death, Q-wave MI, or stroke (HR, 0.959, 95% CI, 0.757-1.214, p=0.726) were not significantly different between stenting and CABG. However, the adjusted risk of TVR was significantly higher in stenting group than in CABG group (HR, 3.694, 95% CI, 2.224-6.136, p<0.001) (Table). Similar results were in comparisons of DES or BMS with concurrent CABG.

Conclusions: During 5-year follow-up, stenting showed similar rates of mortality and of the composite of death, Q-wave MI, or stroke, but higher rates of TVR as compared with CABG for patients with unprotected ostial and shaft LMCA lesions.

Variables	Unadjusted analysis			Multivariate analysis		
	HR	95% CI	P value	HR	95% CI	P value
Overall cohort (N=1083)						
Death	0.854	0.620-1.175	0.331	0.982	0.773-1.248	0.885
Composite outcome	0.792	0.581-1.078	0.138	0.959	0.757-1.214	0.726
TVR	3.694	2.224-6.136	<0.001	3.694	2.224-6.136	<0.001
BMS Vs. CABG (N =420)						
Death	1.051	0.645-1.713	0.842	1.403	0.843-2.337	0.193
Composite outcome	0.931	0.581-1.491	0.766	1.193	0.733-1.944	0.478
TVR	3.718	1.777-7.776	<0.001	3.718	1.777-7.776	<0.001
DES Vs. CABG (N =663)						
Death	0.734	0.481-1.122	0.153	0.994	0.629-1.572	0.981
Composite outcome	0.704	0.467-1.061	0.094	0.908	0.584-1.411	0.668
TVR	3.607	1.793-7.256	<0.001	3.607	1.793-7.256	<0.001